This presentation is for illustrative and general educational purposes only and is not intended to substitute for the official MSHA Investigation Report analysis nor is it intended to provide the sole foundation, if any, for any related enforcement actions.

Coal Mine Fatal Accident 2006-47



Operator: Dana Mining Company Inc

Mine: Prime No 1

Accident Date: December 17, 2006 Classification: Fall of Roof or Back

Location: Dist. 3, Monongalia County, West Virginia

Mine Type: Underground Coal Mine

Employment: 63

Production: 4,000 Tons/Day



On December 17, 2006 at approximately 7:30 p.m. a 26-year old mechanic was fatally injured in a roof fall. The victim and 2 coworkers were traveling through the No. 18 block intersection (No. 2 entry) on a rubber tire personnel carrier when the top began to work and fall. The fall was approximately 28

feet long, 20 feet wide and 5.5 feet thick. The roof fall appears to have resulted from several geological conditions present in the No. 18 crosscut area of the mains. First, ground water inflow over time weakened the rock in the immediate roof susceptible to moisture. The roof fall appears to have started on the inby side of the intersection where moisture had caused weathering or weakening of the immediate roof and progressed along a vertical fracture that cut through the intersection, parallel with the entry.

ROOT CAUSE ANALYSIS

<u>Root Cause</u>: The standards, policies and administrative controls in use at the mine did not equip mine management or miners to recognize the geological conditions (ground water inflow, alternating layers of weathered and fragmented rock, N 50°W trending joint) which contributed to the roof failure.

Corrective Action: Examiners and miners were provided additional training in the recognition of adverse geologic conditions. The approved roof control plan was updated to supplement roof support in the regularly traveled haul road intersections from the No. 1 belt head to the No. 2 belt tail piece. Supplemental support consists of a minimum six cable bolts, 8-14 feet and 6 foot fully grouted roof bolts will be installed with 18 inch by 18 inch roof mats. The provision of supplemental support also was extended to all regularly traveled haul road intersections in the travel entry where adverse geologic conditions are recognized.

ENFORCEMENT ACTIONS

§104 (a) Citation No. 6602914 was issued to Dana Mining Company Inc for the violation of 30 CFR 75.202(a).

Condition or Practice:

The mine operator failed to adequately support or otherwise control the mine roof where miners are required to work or travel. On December 17, 2006 at approximately 7:30 p.m. a 26-year old mechanic was fatally injured in a roof fall that occurred at the No. 18 crosscut section of the mains in the no. 2 entry.

BEST PRACTICES

- Remain alert for changing roof conditions.
- Train all miners to identify unsafe roof conditions, specifically on travelways.
- Remove (Take down) any loose roof or ribs and report any unsafe roof or rib conditions immediately to mine management. Install additional support where entry width and roof bolt spacing exceed roof control plan specifications.
- Conduct thorough examinations in areas where miners will work or travel.